

Salvage and Marine Firefighting Plan

Annex E

2026.0

Record of Changes

Change Number	Change Description	Section Number	Change Date	Name
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				

Contents

1000 Authorities and Responsibilities	3
1100 Responsible Party	3
1101 Vessels	3
1200 U.S. Coast Guard	3
2000 Incident Command System Response	6
2100 Command	6
2101 Unified Command	6
2102 Transfer of Command	6
2103 Command Post	6
2200 Operations	7
2201 Firefighting	7
2201.1 Firefighting Control Plan	9
2201.2 Shipboard Firefighting	9
2201.3 Burning Vessel Movement Considerations	9
2201.4 Fire Suppression Berths	11
2201.5 Anchorage and Grounding Site Selection	11
2201.6 Reasons for Denial	11
2202 Offshore Firefighting Considerations	12
2202.1 Coast Guard Offshore Resources	12
2202.2 Department of Defense Offshore Resources	12
2202.3 Other Offshore Resources	12
2202.4 Offshore Scuttling Area Selection	12
2203 Shoreside Incidents	13
2204 Basic Priorities for Firefighting	13
2205 Response Actions	13
2206 Control of Vessels and Waterfront Areas	13
2207 Salvage	14
2207.1 Identify Response Resources and Salvage Assets	14
2207.2 Vessel and Cargo Salvage Plan	15
2207.3 Salvage Plan Review	16
2207.4 Salvage Plan Implementation	17
2207.5 Evaluation of Salvage Response Contractors	17
2207.6 Destruction of a Vessel	17
3000 Marine Fire-Fighting Checklist	18
3100 Marine Fire Fighting Resources	20
4000 U.S. Navy Supervisor of Salvage (SUPSALV)	21

1000 Authorities and Responsibilities

1100 Responsible Party

Under normal circumstances the primary responsibility for taking or arranging action to resolve an obstruction or other impediment to navigation is the identified owner, operator, or lessee of the vessel or wreck; or, the owner, operator or lessee of other obstructions in the waterway such as structures, trains, cars, and other vehicles. Where a discharge of oil, hazardous substance release or threat thereof is involved, primary responsibility belongs to the Responsible Party (RP).

The identified owner, operator, or lessee of a sunken or grounded vessel or wreck bears lead responsibility in the event that the U.S. Army Corps of Engineers (USACE) and the USCG jointly determine that such a vessel or wreck is a hazard to navigation and must be removed expeditiously.

In the case of an incident, the RP must take adequate measures to mitigate and/or remove damage, or risk of damage, caused by the vessel or the release of any material from the vessel. The RP will pay for all legitimate response measures up to their limit of liability as stated on their Certificate of Financial Liability. If an RP cannot be identified, or the acting RP fails to adequately respond, the Federal On-scene Coordinator may take control of a particular aspect of, or the entire response. In this case funding will be provided by the federal government until an RP is identified and charged for the response.

1101 Vessels

In the case of a vessel fire or salvage operation, the Responsible Party is the vessel's Owner, Operator, Master, or Designees, who will be represented on the UC. The vessel's Master or Designee will maintain control over the vessel, crew, and passengers unless otherwise directed by the COTP. The presence of any Federal, State, and/or Local agencies does not relieve the vessel's Master of command or responsibility for overall safety on the vessel. However, the Master of a vessel should not normally countermand any orders given by fire fighters in the performance of firefighting activities, unless the action taken or planned clearly endangers the safety of the vessel or crew.

1200 U.S. Coast Guard

The USCG has no specific statutory responsibility to fight marine fires; but the COTP is charged with the responsibility for navigation and vessel safety, safety of waterfront facilities, and protection of the marine environment within the COTP's area of jurisdiction. This authority allows the COTP to:

- Direct the anchoring, mooring, or movement of a vessel;
- Specify times of vessel entry, movement, or departure to, from, or through ports, harbors, or other waters;
- Restrict vessel operations in hazardous areas; and
- Direct the handling, loading, discharge, storage, and movement; including emergency removal, control, and disposition of explosives or other dangerous cargo or substances, on any bridge or other structure on or in the navigable waters of the United States or any land structure immediately adjacent to those waters.

An agency charged with providing fire protection for any property of the may enter into reciprocal agreements with state and local firefighting organizations to provide for mutual aid. Further, an agency which provides that emergency assistance may be rendered in the absence of reciprocal agreements, when it is determined by the head of that agency to be in the best interest of the United States.

The USCG has traditionally provided firefighting equipment and training to protect its vessels and property. Occasionally, Coast Guard units are called upon to provide assistance at fires on board vessels and at waterfront facilities. For more detailed information regarding the USCG's policy and firefighting capabilities, see the U.S. Coast Guard Addendum to the U.S. Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR).

The FOSC/COTP will provide on-scene representatives that are familiar with shipboard construction, layout, common firefighting systems, and vessel stability. FOSC/COTP authority can be exercised as necessary to maintain safety of the port, associated waterways, and maritime related facilities. The degree to which that authority will be exercised will depend on a number of factors, but will generally be based on the nature of the incident, the degree of danger posed to the port and the information provided through the establishment of a Unified Command.

The COTP authority extends over the land-side areas of all waterfront facilities such as shipyards, terminals, piers, and wharves. Their responsibilities include:

- Coordinate firefighting and salvage activities under a Unified Command;
- Coordinate all Coast Guard forces and equipment responding to the incident;
- Coordinate port safety and vessel traffic management with maritime industry representatives;
- Control vessel traffic as necessary in the incident are to minimize the adverse impact of the incident on marine traffic and to facilitate firefighting and/or salvage operations;
- Establish safety or security zones as necessary;
- Provide information on the involved waterfront facilities;
- Provide information on the location of hazardous materials on the vessel or at the facility, if available;
- Provide technical data on ship's construction and stability;
- Respond to oil discharges or hazardous substance releases. Actual removal may be delayed until firefighting and/or salvage operations are complete; however containment and protective measures should be implemented immediately;
- Evaluate relocating moored and anchored vessels in vicinity of salvage operation; and
- Alert owner/operators of terminals and/or vessels at risk.

The COTP/FOSC's primary concern in responding to a vessel or facility fire is to ensure the safety of life and protection of the environment. Secondary concerns include vessel traffic and preserving property. Paramount in preparing for vessel or waterfront fires is the need to integrate Coast Guard planning and training efforts with those of other responsible agencies, particularly local fire departments and port authorities. COTPs shall work closely with other Coast Guards units, municipal fire departments, vessel and facility owners, and operators, mutual aid groups and other interest organizations to ensure planning in each ports' Area Contingency Plan for the COTP zone in accordance with federal law and Coast Guard regulations.

To minimize impacts of a discharge/release on sensitive species and environments, resources should be identified prior to a spill event. The FOSC, SOSC, and Responsible Party (RP) must be aware of the sensitive environments to ensure that appropriate measures are taken to minimize effects of any response actions on ecologic, cultural, and economic resources. Response strategies and protection priorities are generally identified at the Area Committee level but also depends on the type, quantity and location of the discharge/release. An understanding of the landscape, environments and resources is imperative when selecting a particular response action.

2000 Incident Command System Response

2100 Command

A major waterfront facility, vessel fire, or a salvage operation will involve response teams from federal, state, and local agencies. The nature and location of the incident will be the deciding element in determining which agency assumes overall command or lead agency in a unified command. Overall command or lead agency must be determined as early as possible in the incident to ensure the effective use of personnel and equipment.

2101 Unified Command

In instances when several jurisdictions are involved or several agencies have a significant management interest or responsibility, a UC with a lead agency designation may be more appropriate for an incident than a single command response organization. Generally, a UC structure is called for when the incident occurs that crosses jurisdictional boundaries, involves various government levels (e.g. federal, state, local), impacts functional responsibilities, or a combination thereof. Such circumstances would pertain for almost any fire at a facility or a vessel at pier side or anchorage because of similar responsibilities of local fire departments, other emergency response organizations, and the Coast Guard for the saving of life, the environment, and property.

2102 Transfer of Command

The presence of local fire fighters or USCG personnel does not relieve the Master or Owner/Operator of command, or transfer their responsibility for overall safety on the vessel or facility. However, the Master should not normally countermand any orders given by local fire fighters in the performance of firefighting activities onboard the vessel or facility, unless the action taken or planned clearly endangers the safety of the vessel's safety and crew.

2103 Command Post

When an incident occurs there is an immediate need for a coordinated/integrated response effort, since federal, state, and local jurisdictions will be involved. If this occurs a Command Post will be established on-scene by the lead responding agency. The USCG FOSC or FOSCR should be on hand and maintain communications with the USCG resources involved. Other key personnel that may be on hand at the on-scene command post include vessel's officers, marine chemist, facility operator, local responders, and port officials. The representatives present should have authority to make decisions to facilitate rapid and proper response.

2200 Operations

Initial response operations will be the responsibility of the owner/operator of the vessel, platform, or facility. Owners and operators of vessels, platforms, or facilities must develop their own contingency plans to respond to marine fires.

2201 Firefighting

Local firefighting organizations (municipal, industrial, and contractor) must be prepared to respond within the limits of their training and capabilities. If firefighting resources are not trained or capable of handling a marine fire, they can take appropriate measures to prevent the fire from spreading to nearby exposures. The USCG cannot contract mutual aid organizations for vessel, platform, or facility owners/operators. Facility owners and operators must take additional steps to limit the spread of fire to or from their facility and any vessels docked nearby.

The USCG will provide assistance as available including:

- Establishing safety zones;
- Rerouting or restricting vessel traffic;
- Making marine broadcasts;
- Assistance with search and rescue or medical evacuation;
- Deployment of USCG resources;
- Pollution response.

The Master of the Vessel may deny local firefighters access to the vessel and utilize vessel resources to control and fight the fire. If the USCG determines that the Master's efforts are inadequate, actions may be taken to ensure a proper response. Firefighting resources will be employed based on:

- Rescue/life safety;
- Location and extent of fire;
- Class of fire and cargo involved;
- Potential impact on local community;
- Additional exposure concerns (facilities, vessels, docks, structures, etc.);
- Possibility of explosion;
- Stability of the vessel or platform;
- Hazard to crew or other resources at location;
- Weather forecast;
- Maneuverability of vessel;
- Effects on bridges which must be transited;

- Alternatives if the vessel is not allowed entry to or movement within a port.

The COTP or representative of the COTP serving within the Operations Section will direct the employment of USCG resources (small boats, helicopters, USCG Strike Team, etc.) in accordance with established policies and the needs of the UC. Other responding agencies will report to the UC for assignment of duties. The Master of the Vessel or Platform supervisor will:

- Implement the initial response based on the fire control plan of the vessel or platform.
- Establish communications, both internal and external. Ensure that proper notifications are made to the appropriate fire department or contractor and the USCG. If appropriate, notify the facility to which the vessel is docked, the port authority, and nearby vessels.
- Control the operation and use of all fixed firefighting systems aboard the vessel or platform.
- Coordinate the efforts of shipboard or platform fire teams in responding to the fire.
- Decide if it is necessary to abandon ship/platform. If the crew is ordered to abandon ship/platform, the master or supervisor will ensure that the proper procedures are carried out and that the Coast Guard is immediately notified. The UC will then coordinate the firefighting operations of all responding agencies.

Operational response will be based on the following tactical priorities:

- Rescue/Life Safety
- Protection of Exposures (facilities, vessels, docks, structures, etc.)
- Containment, Extinguishment, and Property Conservation
- Fire Salvage and Overhaul
- Environmental Protection

Vessel and Facility Salvage Marine Firefighting response considerations include:

- Establishment of a command post and appropriate implementation of ICS/Unified Command;
- A complete size-up to determine potential for rescue operations and what is burning (class of fire and materials involved);
- Contact appropriate marine firefighting, environmental response, and marine salvage contractors (as necessary by Owner/Operator or COTP if necessary);
- Determination as to whether the fire main system is operating and the location of other firefighting resources on board;
- Obtaining the fire control plan of the vessel, platform, or facility;
- Hose lines taken aboard vessels should be large hose lines (4" to 6") with reducers for smaller hand lines and sufficient international shore connections (as appropriate);
- Maintaining two separate gangways to the vessel, one for personnel access and the other distinctly to serve as a hose conduit or support;
- Determination as to whether the ventilation system is operable. If not, portable equipment may be required;
- Consider need for additional lighting resources to support operations;
- Planning for additional equipment to arrive on scene during early stages of the response. Establish appropriate staging areas for arriving equipment;

- Recognition that a language barrier may exist. The vessel's agent, a vessel's officer, or other interpreter may be required.

2201.1 Fire Control Plan

Vessel fire control plans are stored in a weather tight container at the topside of the gangway usually attached to the bulkhead or inside the access door to the superstructure. This plan is available for use by shore side firefighting personnel. The plan shows a layout of each deck, fire protection systems aboard the vessel, and other information important to firefighting responses.

2201.2 Shipboard Firefighting

Marine firefighting is substantially different from standard structural firefighting requiring specialized equipment and training. The Unified Command should follow some general guidelines for operational considerations:

- Muster the Crew - Remove all non-essential personnel off the vessel and away from the scene. Make sure the Master, Mates, and all engineering personnel remain where they can be used as an information resource.
- Rescue - Life safety must always be the first consideration in any fire or emergency situation. When lives are in danger, the Unified Command must quickly assess whether the situation necessitates immediate removal of personnel, the number of persons that need extraction and the hazards to the rescue team.
- Exposure - Typical exposures include flammable liquid or gas tanks, open stairways, explosives, or any other substance that would accelerate or aid the spread of the fire. Provided there is no danger of water reactivity, exposures are best cooled by application of a fog pattern until no visible steam is generated. For some two dimensional surfaces foam may be an appropriate agent for exposure protection.
- Stability - During firefighting excess water onboard can create flooding and free surface effect. This could prove disastrous for the vessel leading to list and even sinking. Since local fire services do not typically have training in this field, there is a substantial risk that this could occur. This is the area of expertise that other response agencies will depend on the Coast Guard to contribute. The Salvage Engineering Response Team (SERT) is available 24/7 to provide professional advice and provide technical solutions.
- Extinguishment - The fuel source, amount of fuel/surface area and the location of the fire will determine the tactics and agents to be used.
- Overhaul - Ensuring that the fire will not re-flash and determining the point of origin and source of ignition. A detailed photographic record of the fire scene prior to commencing overhaul is a necessity to aid in post fire investigation.
- Ventilation - Generally, all ventilation on a vessel will initially be secured upon receipt of a fire alarm. Utilization of ventilation tactics to aid in extinguishment should not begin until a coordinated attack is staged.

2201.3 Burning Vessel Movement Considerations

A crucial decision that must be made by the COTP is whether or not a burning vessel should be allowed to enter or move within the port. Types of vessel movements that may be required in an emergency include movement from sea to an anchorage or a pier; from an anchorage to a pier; from a pier to an anchorage; grounding a vessel; or scuttling a vessel offshore.

Due to the limited resources available to fight an offshore fire, the COTP may be forced to consider allowing a burning vessel to enter port.

There are numerous considerations that the COTP should evaluate when faced with the decision of whether or not to allow a burning vessel to enter or move within a port. The following information should be gathered and considered prior to making such a decision:

- Location and extent of fire;
- Status of shipboard firefighting equipment;
- Class and nature of cargo;
- Possibility of explosion;
- Possibility of vessel sinking/capsizing;
- Hazards to crew or other resources where vessel is present;
- Forecasted weather (including bar conditions if applicable);
- Maneuverability of the vessel (i.e. is it a dead ship, etc.);
- Availability (and willingness) of assist tugs;
- Effect on bridges under which the vessel must transit;
- Potential for the fire to spread to the pier or pier structures;
- Firefighting resources available ashore and offshore;
- Possibility of vessel sinking or capsizing thereby becoming an obstruction to navigation;
- Consequences/alternatives if the vessel is not allowed to enter or move;
- Potential for pollution.

The above considerations should be investigated by the Lead Fire Department's Chief and/or the IC/UC by examining the vessel and cargo manifest before the vessel is allowed to enter port or move within the port. The COTP should make every effort, as the situation allows, to consult with the appropriate Fire Department Chief, Port Director, local government officials, Vessel Owner's Agent, and other experts depending when making a decision.

In addition, the FOSC/COTP, in conjunction with the USCG Eighth District, and the Region VI Regional Response Team (RRT), shall assess the pollution risks and determine whether the vessel will be allowed to proceed to sea to reduce the risk of the pollution hazards.

Entry to port or movement may be permitted when:

- The fire is already contained or under control;
- There exists little likelihood that the fire would spread;
- A greater possibility exists that fire could and would be readily extinguished with available equipment in port before encountering any secondary hazards of explosion or spread of fire;
- All relevant and available parties have been consulted.

Entry to port of movement may be denied when:

- There is greater danger that the fire will spread to other port facilities or vessels;
- The likelihood of the vessel sinking or capsizing within a navigation channel, and becoming an obstruction exists;
- The vessel may become derelict;
- Unfavorable weather conditions preclude either the safe movement of the vessel under complete control or would hamper firefighting (high winds, fog, strong currents, etc.);
- Risk of a serious pollution incident by oil or hazardous substances exists.

Additional considerations:

- Safety Broadcast and Notice to Mariners;
- Ordering the movement of other vessels or cargo that may be impacted;
- Locating the vessel to best facilitate the use of available resources.

2201.4 Fire Suppression Berths

Several considerations enter into the selection of piers as a location to fight a shipboard fire:

- Paramount is the combustibility/flammability of pier structures and contiguous facilities;
- Availability of adequate volumes and pressure of fire protection water;
- Access to response boats and vehicles;
- Minimizing risk of impeding navigation;
- Risk to nearby vessels and facilities.

2201.5 Anchorage and Grounding Site Selection

When choosing anchoring or grounding locations, some of the same factors must be considered, as the effects on navigation and minimizing the risk to surrounding communities and to the environment. The possibility of the vessel sinking or becoming a derelict is very real and could prove a greater harm to the marine system than the loss of a single vessel. The initial considerations are:

- Bottom material that is soft enough so that the ship's hull will not be ruptured;
- Water depth that is shallow enough so that the vessel could not sink below the main deck, yet deep enough so that fire boats, salvage barges, and tugs can approach; tides and other river level fluctuations must be considered;
- Accessibility to firefighting, spill response, and salvage assets.
- The location and suitability of boat ramps and piers to be used as staging areas must also be evaluated when considering grounding or anchoring sites.

2201.6 Reasons for Denial

Entry into a port or movement within a port may have to be denied when:

- There is danger that the fire will spread to other port facilities or vessels;
- The vessel is likely to sink or capsize within a channel, becoming an obstruction to navigation;
- The vessel might become a derelict;

- Unfavorable weather conditions preclude the safe movement of the vessel or would hamper firefighting (high winds, fog, strong currents, etc.);
- Risk of serious pollution incident by oil or hazardous substance exists.

2202 Offshore Firefighting Considerations

In addition to the problems associated with any shipboard fire, an offshore incident is further complicated by the poor flow of information and difficulties in supplementing the vessel's firefighting resources. Reports from the vessel may be confusing due to language difficulties or the simple fact that the crew is too busy fighting the fire to provide detailed information. Until additional resources can be brought to bear, the vessel's firefighting equipment and crew will be the only resources available. The vessel's Primary Resource Provider is required to have firefighting and salvage assets and personnel on scene within the planning timelines listed in the Vessel Response Plan. Additional resources in the form of public or private vessels may not be close enough to respond in a timely manner and may be ill-equipped to provide significant assistance.

2202.1 Coast Guard Offshore Resources

During an offshore fire, ships and aircraft become important resources. Coast Guard Aircraft may provide a timely source of information during the early stages of a response and can be used for personnel or equipment transfers. Coast Guard vessels are limited in their ability to assist in a shipboard fire, but are much better equipped than commercial vessels and have damage control teams that are drilled regularly in shipboard firefighting. In addition to improving communications, larger Coast Guard vessels with flight decks can be used to stage equipment flown to the scene.

2202.2 Department of Defense Offshore Resources

Firefighting equipment may be available from various Department of Defense (DOD) sources. In addition to the transportation capabilities, DOD aircraft and vessels can be invaluable in an offshore fire situation for the same reasons discussed for Coast Guard assets. The possibility of Naval or USACE vessels operating in the vicinity which can assist should not be overlooked.

All requests for DOD assistance should be made through the USCG Eighth District Command Center.

2202.3 Other Offshore Resources

Any ship becomes a valuable resource during an offshore vessel fire, even those with small crews and minimal firefighting capability. At a minimum, another vessel can provide a means of escape for a burning vessel's crew should their efforts to control the fire fail.

Vessels in the area may be notified of a situation via Automated Mutual Assistance Vessel Rescue System (AMVER) or with a Broadcast Notice to Mariners.

Tug companies in the vicinity may assist in fighting the fire, moving a dead ship or transporting equipment. While few vessel operators would be reluctant to assist in a life-threatening situation, vessel owners may not be willing to respond to a fire-fighting situation that could risk their vessels or crew in order to protect a ship or cargo once the crew is safe.

2202.4 Offshore Scuttling Area Selection

If a vessel cannot be safely moved to a port, and it is possible that the vessel and cargo could be lost (either intentionally or not) the vessel should be moved to an area where environmental damage will be minimized. The information in this section should be reviewed to identify the best area to move the vessel. Depending on the positioning of the vessel, COTP should consult with BSEE, EPA, and NOAA on any decision concerning the scuttling of a vessel.

2203 Shoreside Incidents

For fires at a facility or on a vessel moored to a facility, there should be one command post. The Command Post should be established as close to the incident as safety permits. Ideally the command post would be located in an office at the facility. At a minimum, it should:

- Accommodate multiple telephone lines;
- Provide a large open area to permit status boards maintenance;
- Provide adequate lighting, heating, etc.

2204 Basic Priorities of Firefighting

It is impossible to anticipate every task or activity that will be required to effectively respond to major marine fires. There are, however, several basic priorities, that must be addressed, particularly in the case of a vessel fire at sea.

- Once initial notification is received, responders must determine the worst- case scenario and the urgency of the situation;
- The appropriate resources need to be informed and requested;
- If the incident appears imminent and substantial, response resources must be dispatched immediately before making routine notifications and obtaining additional information.

2205 Response Actions

Situation assessment is one of the initial and critical actions taken in a response to a marine fire. This involves evaluation of available facts and probabilities.

The assessment consists of at least the following six steps to rapidly form a deliberate plan of action:

1. Gather facts
2. Assess probabilities
3. Determine resources
4. Apply basic firefighting principles
5. Decide a course of action
6. Formulate a plan of operations

Pertinent facts might include location of fire, location of crew/personnel, acquiring vessel fire plan, vessel/facility condition, stability issues, type and condition of cargo, and response equipment available.

A Marine Fire-Fighting Checklist is included below.

2206 Control of Vessels and Waterfront Areas

To secure the safety of waterfront facilities and vessels, the COTP may control or restrict vessel traffic in the affected area. The COTP has the sole authority to establish a Safety Zone.

A Safety Zone may be established around a burning vessel to facilitate access for fire or rescue units and to protect uninvolved persons or vessels, or it could be used to ensure the safer transit of a vessel carrying dangerous cargo. Safety Zones should be established on a temporary, and usually, emergency basis in response to a situation beyond the scope of normal safety measures.

2207 Salvage

Any salvage response will be characterized by the type of incident that required it and the salvage response will ensure waterways can support maritime commerce as a post-incident activity once initial response has been completed. Salvage response operations, for planning purposes, are considered an element of the short-term recovery phase (3-90 days post incident).

The following progression provides an orderly approach:

1. Perform an assessment to determine what has happened and what is needed (if anything) in terms of a salvage response for facilitation of maritime commerce and disposition of damaged vessel.
2. Primary responsibility for salvage response belongs to the RP, and through the RP, to insurance underwriters. Determine if there is a RP or not, and whether or not the RP has accepted responsibility and is capable of performing the necessary salvage response within an acceptable period, as determined by applicable rules and regulations. If so, then determine oversight responsibility within the UC and coordinate oversight and support as may be appropriate consistent with applicable jurisdiction and authority. If not, or there is no RP, proceed to Step 3.
3. Determine the appropriate authority and funding source or combination of authority and funding sources that is/are available and will be needed to perform essential salvage response. Determine federal lead and supporting roles, and transitions in roles and responsibilities when multiple authorities and funding streams will be needed to complete salvage response. Once Authority and Funding are identified, a salvage plan specific to the incident should be developed. The incident specific salvage plan should be prepared by technical specialists with the subject matter expertise necessary to conduct site-specific salvage assessments and to develop and implement procedures to resolve the obstruction(s) to navigation.
4. Once the arrangement for salvage support or contracting of commercial salvors to perform the salvage operation is made, the salvor will mobilize salvage response operations and conduct the necessary salvage operations.
5. Plan and conduct documentation and reporting to provide a record of salvage response and to track and monitor costs incurred by the Government. Periodic reporting will be required to keep the UC posted on developments, and will follow the reporting schedule and protocols that are established for the incident.

2207.1 Identify Response Resources and Salvage Assets

The RP should immediately contract and set into motion adequate response and salvage resources. Historically, there has been reluctance on behalf of the vessel's representatives to engage a professional salvor. A decision to attempt operations without a professional salvor should be examined critically by the FOSC. To assist the RP in contracting a professional salvor, the FOSC may share information of proven response and salvage resources. In addition to ensuring that the RP has contracted adequate response resources, the FOSC should identify and deploy appropriate Coast Guard resources to respond to the incident. These response teams should include unit Pollution Responders, Casualty Investigators, and Marine Inspectors.

Furthermore, the U.S. Coast Guard Salvage Emergency Response Team (SERT) at the Marine Safety Center should be engaged and, potentially the Navy's SUPSALV.

2207.2 Vessel and Cargo Salvage Plan

Working with the RP and a naval architect, the salvor must develop a salvage plan. The plan must detail actions to be taken and resources to be used, and it must set organizational responsibilities and the anticipated schedule. After the plan is prepared and prior to initiating salvage operations, the RP must submit the plan to the FOSC or the FOSC designated representative, for review. The FOSC will review the plan, and approve or disapprove it based on real or potential risks to port safety and the environment. Any plans for the intentional jettisoning of cargo will be reviewed as part of the salvage plan.

Upon arrival, the salvage ship or vessels and personnel, should conduct damage control and position stabilization. Damage control actions may range from augmenting the ship's crew, to conducting firefighting and flooding control. Position stabilization consists of securing the ship at the first opportunity to prevent it from broaching or being driven further ashore.

The salvage plan should be considered a flexible working plan with appropriate changes made in response to changing conditions.

Depending on the urgency and complexity of the operations, the detail of the plan may vary. All involved parties must ensure that the plan provided is appropriate given the constraints of the operation. Given optimal conditions, as well as time and resources available, a complete salvage plan may include the following elements:

All Incidents:

- Pre-incident drafts fore and aft;
- Cargo listings/volumes;
- Fuel volume;
- Status of vessel propulsion and steering systems;
- Post casualty drafts;
- Contingency planning in identifying possible failure points;
- Lightering considerations;
- Clear understandings or contractual agreement of responsibility for control of the vessel;
- Strength of hull girder, damaged areas, attachment points, and rigging;
- Booming considerations;
- Means for controlling interference between pollution response and salvage efforts;
- Potential pollution risks and precautions to avoid or minimizing impact;

- Communications plan;
- Anticipated start time and predicted tides, currents and weather

Grounding:

- Post casualty drafts/locations;
- Soundings;
- Bottom type;
- Estimated ground reaction;
- Force-to-free;
- Towing assets available/utilized and horse power of each;
- Predicted stability when re-floated;
- A summary of the engineering rationale for retraction and re-floating techniques;
- Tow/rigging plan including attachment points.

Lightering

- Volume of cargo/fuel to be lightered;
- Type of cargo to be lightered;
- Identification of compatible receiving facilities;
- Special procedures to handle hazardous cargo/materials.

Flooding

- Identification and listing of all dewatering systems to be employed;
- Order of dewatering to ensure satisfactory stability of the vessel.

Transit Plan

- Identification of transit route and final destination;
- Means for controlling the vessel as it is freed;
- Route identified, with special attention to increase draft and beaching areas;
- Vessel escorts, if any, to be employed and horse power of each;
- Any preparation of the vessel necessary to gain permission for entry into destination.

2207.3 Salvage Plan Review

The following is designed to assist the FOSCR/COTP Representative to evaluate the impact of a Salvage Plan.

1. Quickly gather all information needed during the response to a marine casualty,
2. Provide the Responsible Party (RP) with a guide for preparing and submitting a salvage plan,
3. Develop quick action response plans specific to their unit,
4. Evaluate Salvage Plan for impact on:
 - Personnel safety,
 - The environment,
 - Waterways and shipping,
 - Commercial facilities,

- Recreational areas,
- The overall response effort.

2207.4 Salvage Plan Implementation

During Salvage Plan implementation, all parties must be in close communication, and the process should be brought to a halt if significant safety problems develop. The salvor, RP, and the FOSC/COTP or the FOSCR have the authority to stop salvage operations in this case.

Conditions must be continually monitored during salvage operations to ensure no additional risk to personnel, the environment, or infrastructure. In the case of a heavily damaged vessel, the risk to the port and the environment may not warrant allowing the vessel to transit through or be brought into the harbor. In some cases, it may be desirable to allow the vessel to sink in deep water to mitigate environmental damage, or minimize risk to life. These are decisions that will involve all parties in the salvage effort, and the FOSC must take the lead to assure that the best management of the incident/threat is achieved.

2207.5 Evaluation of Salvage Response Contractors

Often, the employment of professional salvage contractors during a marine casualty is critical to ensuring the safest and most expeditious resolution of an incident. The following guidelines

assist the IC/UC in determining if the salvage contractor hired by the RP/Affected Party has the knowledge and capability to undertake the salvage operation. The salvage contractor should:

- Currently provide salvage response services;
- Documented history in the business;
- Own response equipment;
- Trained employees;
- 24-hour capability and a history of proven response capabilities;
- History of drills and exercises;
- History of creating comprehensive and successful salvage plans;
- Membership in professional associations;
- Have employer's liability and salvors liability insurance;
- Be well capitalized for the intended operation;
- Local experience;
- Proven logistical capability;
- Follow OSHA rules and regulations regarding HAZWOPER and diving operations.

2207.6 Destruction of a Vessel

In the event a vessel must be destroyed, Appendix K of COMDTINST M16000.14A (Marine Environmental Response Manual) includes the policy and checklist requirements.

3000 Marine Fire-Fighting Checklist

Initial Information		
Name of Reporting Party:	Phone:	Address:
Reporting Party's Relationship to the Incident:		
Nature of Incident: ☐ Vessel Fire ☐ Facility Fire ☐ Explosion ☐ Collision ☐ Other: _____		
Location of the Incident:		
Vessel Fire		
Vessel Name:	Call Sign:	Location of the fire:
Agent Name:	Agent Phone:	Vessel Flag:

Marine:	Berth:	Anchorage:
Facility Fire		
Facility Name:	Location of the fire:	
Facility Phone:	Facility Address:	
Fire and Safety Information		
Status of fire: _ Extinguished _ Contained _ Out of Control		Class of Fire:
Firefighting Efforts: _____		Source of Fire: Source Secured?
Shipboard/Facility Firefighting Systems: Type(s) Available: Type(s) Expended: _____ Remaining Resources: _____		
Safety Information		
Personnel Status (check boxes): Are there any personnel casualties? Yes No Location(s): _____ _____ Number of Deaths: _____		Are there any personnel missing or trapped? Yes No Are there any injured personnel? Yes No Injuries: _____
Vessel Status: Can the vessel maneuver? _ Yes _ No		Does the Master wish to anchor/moor the vessel? _ Yes _ No
Surrounding Area Hazards		
Cargo information: Type: _____ Quantity: _____ Distance from fire: _____ Location: _____ Type: _____ Quantity: _____ Distance from fire: _____ Location: _____		

Type: _____ Quantity: _____ Distance from fire: _____ Location: _____
Type: _____ Quantity: _____ Distance from fire: _____ Location: _____
Nearby Vessels/Facilities:
Type: _____ Name: _____ Distance from fire: _____
Type: _____ Name: _____ Distance from fire: _____
Type: _____ Name: _____ Distance from fire: _____

3100 Marine Firefighting Resources

AGENCY	PHONE
Brunswick County EM Bolivia NC	910-253-5383
Cape Fear Pilots Association Southport NC	910-457-6909
Cape Fear River Pilots Assn. Southport NC	910-457-6550
Carteret County EM Morehead City NC	252-222-5841
Currituck County EM Currituck	252-232-6013
Elizabeth City FD	252-621-7091
Emerald Isle FD	252-354-2445
Hyde County EM, Swan Quarter	252-926-3171
KTA Marine Firefighting	910-454-0754
McAllister Towing of Wilmington	910-762-2630
Morehead City FD	252-247-2611
MOT Sunny Point FD Southport NC	910-341-8219
NC Eastern Division EM Kinston NC	252-520-4923
NC State Ports Authority	910-763-1621
New Hanover County EM Wilmington, NC	910-798-6910
New Hanover County Fire Service Wilmington NC	910-798-7420
Oak Island FD	910-278-1000
Pasquotank & Camden County EM Elizabeth City NC	252-335-4444
Saint James FD, Southport NC	910-253-9990
USCG COTP Sector NC	910-343-3880
Wilmington FD	910-343-4776

4000 U.S. Navy Supervisor of Salvage (SUPSALV)

SUPSALV has an extensive salvage/search and recovery equipment inventory, and the requisite knowledge and expertise to support these operations including specialized salvage, firefighting, and petroleum, oil, and lubricants offloading capability even in open sea response incidents.

SUPSALV can also provide equipment for training exercises in support of national and regional contingency planning objectives. The FOSC may request assistance directly from SUPSALV. Formal requests are routed through the Chief of Naval Operations.